Appendix C – Patuxent River Naval Air Station Interview Summaries

List of Interviewed Personnel

Robert "Bobby" Bean (BB)
Business Planning/Business Information
Pax River - DPW
Ph: 1-(301)-342-3101
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Keith Harless (KH)
Senior Technology Manager
National Technologies Associates
Ph: 1-(301) 342-3363

Melinda Lynch (ML)
Environmental GIS Specialist
EMA
Ph: 1-(301)-342-4246

Andrew Stanton (AS)
Programmer
American Management Systems
Ph: 1-(___)-___-____

Edward Dancausse (ED)
Environmental Engineer -Wastewater
Pax River - Dept. of Public Works
Ph: 1-(301)-342-4246

Don Shaver (DS)
Environmental Biologist -Wastewater
Pax River - Dept. of Public Works
Ph: 1-(301)-342-4517

Mary Samuels (MS)
Environmental Engineer - PCBs
Pax River - Dept. of Public Works
Ph: 1-(301)-___-____

Ritch Bullis (CJ)
Deputy Prog. Mgr. - Haz. Materials
Pax River - Safety
Ph: 1-(301)-342-1817

Joseph Fears (J.)
Environmental Compliance
Pax River - Dept. of Public Works
Ph: 1-(301)-342-4517

Richard Tarr (RT)
Installation Restoration Program
Pax River - Dept. Public Works
Ph: 1-(813)-828-3383

Bayly Smith (BS)
IRP Project Manager
Pax River - Dept. Public Works - IRP
Ph: 1-(813)-828-2582

Julie _____ (J_)
Indoor Air Quality
Pax River - Hospital

Mr. Charles Redmond
Utilities/Maintenance Planning
Pax River - DPW
Ph: (301) 342-3363 x106

Luci Dunbar
Asbestos
Pax River - DPW

Mr. Ron Emerson
Lead Paint
Pax River – DPW

TSSDS Questions (Exposure)

Contact: Mr. Robert "Bobby" Bean
Business Planning/Business Information Manager
Pax River - DPW
Ph: (301) 342-3101
ean_bobby%pax9a@mr.nawcad.navy.mil

Date of Interview: Wednesday, July 30, 1997

Q Have you ever been exposed to the Tri-Service Spatial Data Standards (TSSDS) for GIS or the A/E/C CADD Standards?

A *Yes, we are aware of both sets of standards, we use the GIS Spatial Data Standards.*

If no:

Are you interested in receiving information on Tri-Service Standards? Yes / No

If yes:

Q Do you or does your office have a copy of the standard? Yes / No

A *Yes there are copies of both the Tri-Service Spatial Data Standards (TSSDS) for GIS and the A/E/C CADD Standards, in hard copy and electronic format?*

If no:

Would you like to receive a CD-ROM copy of the TSSDS and A/E/C CADD Standards? Yes / No

Q Have you or anyone working in the area of AEC and GIS at your facility ever used the current versions of these standards? Yes/No

A *Yes, in-house staff personnel working with CADD/GIS applications are obligated to use the Spatial Data Standards.*

If yes: Continue to the next question

Q Of those working on CADD/GIS projects related to base activities, which group is the most familiar with the TSSDS and the AEC standards.

A *Pax River personnel who are currently involved with the installation of the GIS.*

Q Approximately how many times have you used the Tri-Service Standards?

A *The standards are used on a daily basis, whenever changes are made to CADD/GIS program applications.*

Q What has been your general impressions of the Tri-Service Standards? (TSSDS and AEC)?

A *For the most part the GIS spatial data standards are very complete, we are aware of current TSTC efforts in developing AEC data standards, and look forward to using them.*

Q How would you rate the level of difficulty involved in understanding and using the Tri-Service Standards? (TSSDS and AEC)?

A *The Spatial Data Standards were initially difficult to learn and understand, however, we have learned to use them efficiently.*

Q With what aspects of the Tri-Service Standards programs if any have, you had trouble? Explain. (TSSDS and AEC)

A *We have not had any trouble worth mentioning, it is just a matter of adopting the methodology.*

Q Do you have specific suggestions on how to improve these characteristics of the Tri-Service Standards programs? (TSSDS and AEC)

A *No, nothing specific as we are in the process of coming into compliance with Ver. 1.6 of the Spatial Data Standards .*

Q Would you be willing to provide additional specific feedback to the Tri-Service Technology Center regarding these issues?

A *Yes. Any opportunity that would serve to improve the standards would be quite beneficial to all parties. Pax river has an excellent working relationship with the Center.*

Q Based on your experience with the Tri-Service Standards programs, are there areas which require additional coverage.

A *At this point in time we are implementing the standards, and cannot accurately comment on their content.*

Q Did the personnel using the Tri-Service Standards teach themselves or learn by another method?

A *Essentially self-taught with the Center's assistance when required.*

Q Based on your experience with the Tri-Service Standards, which of the following would help the most to ensure that the standards are more uniformly implemented at your facility?: (please rank selections)

1.) A training program for GIS specialists
2.) Examples of Tri-Service Standard compliant projects similar to in-house applications
3.) An implementation manual which conceptually steps an information system specialist through the setup of a new Tri-Service Standard compliant application and a conversion process of an existing non-compliant application to TSSDS compliant
4.) Other:

A *No. 3 Ranked first as the best method.*
No. 1 Ranked second as the next best method.
No. 2 Ranked third as the next best method.
No. 4 Ranked last as the best method

TSSDS Questions (Project)

Q Has an attempt been made to implement any form of the Tri-Service Standards into a current application use?

A *Yes, the GIS at Pax River has adopted the Tri-Service Spatial Data Standards.*

Q Does any portions of a current database schema comply with the Tri-Service Standards data structures? Please explain.

A *Yes, the Pax River GIS database schema is compliant with Tri-Service Spatial Data Standards.*

Q Likewise, do any of the graphical entities for a current application comply with applicable Tri Service Standards graphical entities? Please explain.

A *The graphical entities that are contained within the Pax River GIS are compliant with Tri-Service Spatial Data Standards.*

Q Are there plans to make current database schema Tri-Service Standards compliant?

A *Yes, our NAVAC facility management standards.*

Q Are there plans to make current graphical entities Tri-Service Standards compliant?

A *The current installation GIS is Tri-Service Standards compliant in terms of graphical entities.*

General Systems - Buildings/Real Estate and Environmental

Q What type of operating platform(s) support your current CAD/GIS applications technology?

A **DPW - (BB):** *For utilities information, Pax River is currently using primarily Intergraph MGE and are trying to integrate MGE with Oracle. A single LAN supports the base.*

A **DPW - (ML):** *Currently, they are using ArcView v. 3.0 (two licenses on particular machines) and ArcView v. 2.0 (on LAN) for environmental issues. Working on full upgrade toward ArcView v. 3.0. There has not been much customization done or many end-user functions incorporated due to the Shore Station Information Systems (SSIS) work being done though Bobby Bean's team. ArcView is currently supported though ArcInfo (for Unix) but they are moving toward Oracle databases.*

Q What type of network operating system(s) is currently being used to facilitate the computers/CAD workstations at this facility?

A **DPW - (BB):** *Pax River's computers are on a Local Area Network (LAN). There are 5 servers (Windows NT 3.5.1). One server has Oracle database software installed.*

Q What kind(s) of computers are currently being used at this site for CAD/GIS, in terms of CPU size capabilities? Also indicate how many of each.

A **DPW- (BB):** *The are approximately 250 desktop PCs connected to the LAN. About 100 of these are Pentiums capable of fully utilizing the SSIS. The other 150 are 486/33s, which can use subparts of the SSIS, but run significantly slower. All machines require Visual Basic and Microsoft t Office Suite to operate the SSIS.*

Q Do the computers at this facility have the capability to access the internet?

A **DPW - (BB):** *Most people in DPW have internet connection.*

Q What type of procedures and or processes are currently being used at this site to maintain a valid electronic file backup, briefly describe?

A **DPW - (BB):** *One of the modules within the SSIS is called the Night Time Management System (NTMS), also commonly referred to as the "While We Sleep Technology", which automatically updates database records, based on new information input each day, and creates a backup database.*

Q Do you have an off-site storage procedure or program in place for electronic file backups?

A **DPW - (BB):** *All back-ups are located on site.*

Q What primary CAD/GIS application software(s) are currently being utilized at this facility?

A **DPW - (ML):** *Within the Environmental Division of DPW, GIS is being used primarily for map development in support of the 46 Installation Restoration sites. Planning on utilizing the information for erosion and soil control planning purposes as well as for storm water management in the relatively near future.*

A **DPW - (BS):** *Limited groundwater modeling in association with fuel farm spill areas has been done in-house. Other groundwater modeling has been done by contractors; that information may or may not be available electronically based on the project.*

Q What add-on CAD/GIS application software(s) are currently being utilized at this facility and which corresponding primary CAD application software(s) support them?

A **DPW - (BS):** *Pax River uses GIS primarily for producing figures for reports and presentations. Very limited groundwater modeling has performed through add on software by Pax River personnel.*

A **DPW - (ML):** *Looking to use GIS for soil and erosion control plans and storm water management analysis issues. Not functional yet. Also, eventually would like to use GIS for air emissions plume modeling.*

A **DPW - (AS):** The ENRMS module of the SSIS has not been used for GIS purposes; strictly data management - inputting and updating.

Q What types of database software are currently being used at this facility, and in what capacity?

A **DPW - (BB):** *Various database packages have been used in the past. Working to migrate to Oracle database for all SSIS applications.*

Q Do you currently use the internet as a vehicle for data exchange, or plan to do so?

A **DPW - (BB):** *Varies from person to person. Internet access is available to everyone.*

Q Do you have any system related remarks and or concerns on which you would like to comment?

A **DPW- (BB):** *Hoping the SSIS will eventually be the model for information management within the Navy. Although GIS application capabilities within SSIS are trying to move toward being TSSDS compliant, Pax River does not necessarily plan on converting all developed data structures to be in accordance with Tri-Service Standards. SSIS is too far along to restructure everything. Also, there is some concern that the TSSDS may be out of compliance with Federal Law 2701.*

Air Emissions/Air Quality Permits and Compliance

Contact: Mr. Charles Johnson - Environmental Engineer - Air
Pax River -DPW - Environmental Division
Ph: 1-(301)-342-4517

Date of Interview: *(Completed Questionnaire)*

General

Q What federal or state programs drive air quality issues at this facility? How are these emissions regulated (individually, facility bubble, regional bubble)?

A *Federal Program - Clean Air Act Amendments of 1990.*
Pax River will soon be regulated under a Title V facility operating permit. This is a bubble requirement for the NAS.

State Program - COMAR 26.11
Emission sources are regulated on an individual basis under MDE regulations.

Q What types of permitted air emissions sources are associated with this facility?

A *Fuel Burning: SOx, NOx, CO, PM, VOCs*
(Boilers, Generators, Jet Test Cells)

Processing: PM, VOCs, HAPs
(Paint Booths, Degreasers, Storage Tanks)

ODS Equipment: CFCs, Halons
(Chillers, Refrigeration, Environmental Test Chambers, Fire Suppression)

Fugitive/Trivial: NOx, CO, PM, VOCs, HAPs, Lead
(Air Stripper, Metal/Woodwork, Welding, Abrasive Blasting, Lead Smelting, Filling Stations)

Data Management Systems

Q Are emissions estimates associated with any permitted sources? Would it be beneficial to manage that information similarly to monitoring (compliance assurance) data?

A *Yes. It is unknown if GIS would be a useful tool for this type of information management.*

Q What is the method of data management/record keeping (paper copies, electronic copies, both)? How long are records kept? How long are records required to be kept?

A *Both electronic records and paper copies. Usually maintained in excess duration of what permit requires. Varies depending on permit condition, pollutant and source.*

Q What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?

A *Paper copies are kept in and environmental department file cabinet. Electronic copies are available off the LAN. This provides an adequate and effective management system for compliance purposes.*

Monitoring and Reporting

Q How are air samples collected? By whom? Is any of the data collected via continuous means (e.g., flow rate)?

A *Requirement for source/stack testing in St. Mary's is under review. Currently, emissions quantification is primarily by EPA AP-42 methods and is conducted annually in most cases. Some units require quarterly reporting. NASPAXRIV PWEN Air Quality Management is responsible for data collection. No CMS.*

Q Is there a Sampling and Analysis Plan for air emissions? Would it be beneficial to access this information via a GIS?

A *No. Some sampling may be done by contractors who have SAP.*

Q What is the frequency of reporting? With what agencies are reports filed?

A *Annual reporting to MDE of most emissions sources. Some units are required to have quarterly reports filed.*

Violations

Q Have there been compliance problem in general or at any specific sources? Explain what enforcement actions have been implemented (NOV, Administrative Orders, Civil Penalties, Public Citizen Enforcement actions)? Would it be beneficial to manage this type of information via a GIS?

A *There are no compliance problems of a recurring nature. Tracking non-compliance issues on GIS would be beneficial.*

Q What are violation reporting requirements (time frame, resampling, reporting)?

A *Per permit conditions (state and federal regulations).*

Q How are violations to be handled? Is this procedure documented?

A *Per permit conditions (state and federal regulations).*

Regional Attainment

Q Are there regional air quality monitoring points on site (e.g., for ozone attainment)?

A *No.*

Visions

Q What changes would you want to see implemented in the management of air permitting and compliance information? State systems applications and comment on changes.

A *There is a need to improve the way Base Maintenance Contractor reports leakage of refrigerants to PWEN, boiler fuel (Natural Gas, #2 Fuel Oil) consumption record keeping, jet engine test cell fuel (JP Fuel) consumption record keeping, generator fuel (diesel) consumption, paint booth operating schedule/material usage record keeping, and degreaser operating schedule/material usage record keeping.*

Surface Water Discharge (NPDES) Permits and Compliance
(Industrial, Domestic, Storm Water, and Miscellaneous Discharges)

Contact(s): Mr. Edward Dancausse - Environmental Engineer
Mr. Donald Shaver - Environmental Biologist
Pax River - DPW - Environmental Division
Ph: 1-(301)-342-4517

Date of Interview: July 30, 1997

General

Q Are surface water discharges regulated under a federal or state program?

A *Pax River has four industrial outfalls, all regulated under a Maryland state NPDES program. Three of these outfalls have oil/water separators associated with them (below ground, gravity flow) and the fourth outfall is from the facility owned treatment works (FOTW).*

Sanitary wastewater is directed off-site to a POTW. Still trying to determine limits for this discharge for POTW. Doing quarterly Form 2C parameters for 1 year, afterward frequency will be reduced.

There are over 100 storm water outfalls, which are managed mainly by the utilities people. These are not required to be monitored, but information on the storm water system will be used in annual re-submittals of the Pollution Prevention Plan (due June 1998).

Q List the types of sources of wastewater effluents to surface water from this facility.

A *Industrial, storm water, and fuel farm pump and treat system discharge.*

Q How are these discharges regulated (individually by outfall, internal monitoring points)?

A *Single permit for all industrial outfalls, each outfall having slightly different monitoring requirements. A second permit for industrial discharges was recently canceled as the outfalls were eliminated. Sanitary wastewater is to POTW which is trying to establish limits for sanitary outfall; POTW will not come upstream and place pretreatment requirements on any particular activity, but NAS may have to do that themselves in order to ensure compliance. Storm water is unpermitted at this time. The fuel farm pump and treat system is regulated under RCRA and has separate permitting issues (petroleum) which are handled through IRP.*

Q Is (are) there on-site treatment plant(s) for waste waters - what type of data collection and management activities take place at these facilities? Would it be beneficial to manage this information via a GIS?

A *The NAS has a Facility Owned Treatment Works (FOTW) at Webster Field which is used to treat numerous industrial discharges. The plant has an operator who is required to collect data on a daily basis. Information on flow, temperature, pH, TSS, and TPH are required by permit. It would be beneficial to manage this information electronically - operator often makes mistakes and forgets to record measurements on paper records. Other industrial outfalls have quarterly monitoring performed for similar parameters.*

Q Are there any unusual ways of disposing or reusing wastewater (land apply, deep well inject, evaporate, etc.)?

A *No.*

Data Management Systems

Q What types of management systems are currently being used relating to wastewater and storm water compliance?

A *Mostly hard copy records. Very little record keeping is done electronically. There is an Excel template for creating DMRs for filing to state as required by permits. There is no electronic submittal to MDE.*

Q What is the method of data management/record keeping (paper copies, electronic copies, both)? How long are records kept? How long are they required to be kept?

A *Only DMRs are electronic - all DMRs ever created electronically are still available for reference. Central wastewater file for hard copy information.*

Q What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?

A *DPW - Environmental Division has a central Wastewater File. FOTW also has copies of relevant records regarding its operation.*

Monitoring and Reporting

Q How are wastewater/storm water effluent samples collected? By whom? Is any of the data collected via continuous means (e.g., flow rate)?

A *Contractors or operators collect samples and provide lab data to NAS. NAS does reporting. No continuous data is collected, except maybe flow and/or pH at FOTW (not sure).*

Q Is there a Sampling and Analysis Plan for wastewater effluents? Would it be beneficial to access this information via a GIS?

A *Trying to establish an SAP mechanism for contractors and operators to follow. SAPs normally required by contractors and reviewed. There are Navy guidelines for sampling and analysis. SAPs have been dynamic in the past, but are good for water/wastewater.*

Q What is the frequency of reporting? With what agencies are reports filed?

A *FOTW- monthly to MDE; other industrial outfalls quarterly to MDE.*
Sanitary - monitor quarterly and report results to POTW (unregulated).

Violations

Q Have there been compliance problem in general or at any specific sources? Explain what enforcement actions have been implemented (NOV, Administrative Orders, Civil Penalties, Public Citizen Enforcement actions)? How are violations to be handled? Is this procedure documented? Would it be beneficial to manage this type of information via a GIS?

A *Permit renewed December 1996. Strictly based on existing monitoring, there have been no compliance problems of a recurring nature. There is an industrial process review going on which may require new parameters to be monitored or new limits established; effects of future requirements on compliance are uncertain.*

Visions

Q What changes would you want to see implemented in the management of wastewater information? State systems applications and comment on changes.

A *It would be beneficial to be able to access "real time" information (daily monitoring records) electronically from the FOTW concerning such things as flow, pH, etc. Then they could better anticipate problem conditions and closer supervision of FOTW operator activities. Starting to implement ENRMS for some management aspects, but mostly for work order management currently.*

Building Environmental Hazards
(Asbestos)

Contact: Luci Dunbar
Asbestos
Pax River - DPW
Ph: (301)

Date of Interview: Thursday, July 31, 1997

Asbestos (TSCA)

Q Has an asbestos survey been done for this facility? Was asbestos or asbestos related materials found to be present at this facility?

A *Yes, an asbestos survey was completed in 1996. Asbestos containing materials have been found throughout the installation as many of the structures were built in the 1940's and 1950's.*

Q What types of asbestos sources are present?

A *Sources present are basically thermal insulation and building, and also some concrete products.*

Q Are locations of asbestos tracked by any means other than the survey?

A *Yes a database application which has been developed and maintained by Pax River personnel. All buildings on base have been surveyed.*

Q Have asbestos remediation activities taken place at this facility within the past 10 years?

A *Yes. Renovation and demolition drive asbestos abatement and maintenance activities.*

Q How are asbestos materials stored on-site? What records are available? What do these records contain?

A *Contaminated asbestos containing materials are not allowed to be stored onsite for any extended periods. Manifests are issued for temporary storage of ACM's*

Q What disposal facilities were used? What testing did they require?

A *Contaminated materials are disposed of at an approved site by the contractors hired for abatement, manifests are required for submission to Pax River.*

Q Has NESHAP comes into play (e.g., when buildings containing asbestos are torn down)?

A *Yes. NESHAP compliance is a factor in dealing with remediation activities. All abatement and remediation activities follow very strict guidelines.*

Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?

A *Currently asbestos management activities are managed through the efforts of a database application, GIS would be a great enhancement for the overall process.*

Building Environmental Hazards
(Lead Paint)

Contact: Mr. Ron Emerson - Lead Paint
Pax River - DPW
Ph: (301)

Date of Interview: Thursday, July 31, 1997

Lead Paint

Q Has a lead paint survey been done for this facility? Is lead paint present at this facility?

A *Yes, a lead survey was completed to the base housing units and lead paint was found in much of the older housing. We assume it is contained in all of the older buildings. Renovation dictates abatement as applied to these facilities.*

Q What types of lead paint sources are present?

A *The sources are quite extensive, essentially interior painted surfaces contain some degree of lead paint coverage, along with some exterior use.*

Q Are locations of lead paint sources tracked by any means other than the survey?

A *No. Other than results of survey information kept in hard copy format (written), actual locations are not defined anywhere else. We need an electronic tracking system put in place to be current and consistent with conditions and status of materials.*

Q Have lead paint remediation activities taken place at this facility within the past 10 years? Have any interim precautionary measures been taken (warning stickers, safe zones, etc.).

A *Yes. As stated prior, renovation of buildings sets the standards for remediation activities in terms of lead abatement and maintenance practices. There have been no precautionary measures taken. There have not been warning stickers or labels posted at any locations.*

Q How are lead paint materials stored on-site? What records are available? What do they contain

A *Contaminated lead paint materials are not allowed to be stored onsite, materials are disposed of immediately. Available records consist of contractor manifests and hard copy records.*

Q What disposal facilities were used? What testing did they require?

A *Contaminated materials are disposed of at a land fill site specified by the contractor. The landfill meets all governing criteria and laws as dictated by legislation.*

Q Has NESHAP come into play (e.g., when buildings containing lead paint are torn down)?

A *NESHAP regulations do not apply.*

Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?

A *Only in hard copy through a "written record" format, GIS could be a solution, currently there are no plans underway to address these needs.*

Building Environmental Hazards
(Indoor Air Quality)

Contact: *Julie _____*

Date of Interview: *(Telephone interview - 7/31/97.)*

Indoor Air Hazards

Q Are indoor air quality surveys conducted for buildings at this facility? If yes, what types of contaminants are monitored (e.g., radon, CO, formaldehyde)? What were the results of past survey? What actions have or have not been taken?

A *No surveys have been conducted. She is essentially a complaint taker and arranges for sampling and analysis. There is no formal indoor air quality program.*

Q Have any building been diagnosed with "Sick Building Syndrome"? For what reasons and what are the suspected causes?

A

Q Are there microbacteria and/or molds problems associated with duct work in any buildings? Explain.

A

Q Is indoor air quality monitored in any of the facility buildings? Why? How?

A

Q Are complaint records relating to the "health" of the buildings kept? By whom?

A

Q Is ductwork cleaned on any kind of regular or informal basis? Is this contracted work?

A

Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?

A

PCBs Management and Disposal

Contact: Ms. Mary Samuels
Environmental Engineer - PCBs, Solid Waste, Recycling
Ph: 1-(301)-342-3612

Date of Interview: Wednesday, July 30, 1997

General

Q List and describe the types of on-site equipment that may contain PCBs:

_X_	Transformers	____	Heat Transfer Systems
____	Capacitors (large, high, low)	____	Air Compressors
____	Hydraulic Systems	____	Others (list)

A *A PCB survey was conducted in 1993. Several areas of PCB contamination were identified and all sources have been remediated and disposed off-site, except for one transformer that is under contract to be remediated/disposed.*

Q Is the equipment totally enclosed? If not have there been PCB related leaks and/or spills?

A *Yes, the remaining transformer is totally enclosed. No known major PCB spills are known to have occurred on site - certainly none big enough to throw the PCB spill area into IR Program.*

Q Has the equipment been sampled for PCBs? When? Would it be beneficial to manage this type of information with a GIS?

A *Information could be transferred or re-input into a GIS, but not useful for compliance purposes anymore.*

Q Is the equipment on site that once contained PCBs and is now rehabilitated/reclassified? Would it be beneficial to manage this type of information with a GIS?

A *Not applicable. Not beneficial.*

Q Are there equipment servicing reports/records kept?

A *Not applicable.*

Q Are all PCB equipment locations defined and tracked by any means? Are there PCB waste storage areas defined? Do these comply with applicable regulations (TSCA - 6" curb, not in flood plain, volume of 2 x largest container or 25% total)?

A *Information on locations of former PCB equipment could be deciphered from the Excel spreadsheets. No PCB storage areas exist on-site anymore.*

Monitoring

Q Does the facility require an annual inventory (use more than 99.4 pounds of PCB)?

A *Not applicable.*

Q Have PCB wastes been disposed off-site in the last 10 years? Which TSCA permitted facilities were used? Are manifests available and in what forms? Are Certificates of disposal available and in what forms? Would it be beneficial to manage this information in a GIS?

A *Yes. Not sure on disposal locations, but probably listed on the spreadsheets. All disposal by contractors (off-site). Hard copy of manifest records and disposal certificates/records may still be around, but not sure of location. Not beneficial to do any additional management of PCB information at Pax River, although there are plans to put a PCB module into ENRMS. Does not even believe this to be useful as PCB management is almost outdated - it is difficult to justify entering historical data into electronic system intended for management.*

Q Does the facility have a SPCC plan applicable to PCBs? Would it be beneficial to incorporate this type of information in a GIS?

A *There is a facility-wide SPCC plan. Will not be relevant to PCBs in the very near future.*

Reporting

Q To what entities are PCB inventories reported to?

A *MDE.*

Q To what entities are PCB waste disposal reports/records submitted?

A *MDE.*

Record Keeping

Q What is the method of data management/record keeping (paper copies, electronic copies, both)? How long are records kept? How long are records required to be kept?

A *Mary maintains PCB removal information (quantity, date, manifest numbers, analytical information, etc.) through Excel spreadsheets (data back to 1982), but there will soon be no need to update them actively. See attached for types of information kept.*

Q What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?

A *Mary has a drawer full of relevant paper documentation regarding PCBs remediation activities. Spreadsheets are on her hard drive. Information is to be kept indefinitely.*

Q What changes would you want to see implemented in the management of PCB related substances information? State systems applications and comment on changes.

A *Would be happiest if PCB management was not a concern, since remediation is essentially complete and adequate documentation is available for historical purposes. No need to "beat a dead horse". What would be infinitely more useful would incorporation of solid waste tracking and recycling efforts through GIS. These ongoing activities will continue into the foreseeable future.*

Regulated Storage Tank Management

[Above Ground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)]

Contact: Mr. George Weeks
Environmental Engineer - Tanks
Pax River - DPW - Environmental Division
Ph: 1-(301)-342-4517

Date of Interview: *(Completed questionnaire)*

Data Management Systems

Q Does this facility maintain an electronic inventory of regulated ASTs tanks and/or USTs?

A *Yes, both.*

Q What types of information is kept on these tanks? In what form(s)?

X	General Condition	___	Clearances (from other structures)
X	General Description	___	Weather Protection/Heating/Cooling
Inc	As-Built Drawings	X	Spill Prevention Systems
X	Construction Materials/Lining	X	Overfill Prevention Systems
X	Installation Date	X	Leak Detection Systems
Inc	Tank Openings	X	Vapor Recovery Systems
X	Capacity	X	Service Status
X	Level Indication (real time)	X	Tightness Testing
___	ASTM Ratings *(UL records)*	Inc	Historic Inspection Reports
Inc	Maintenance Records	Inc	Elevation Drawings/Info
___	Other (list)		

Inc = Incomplete
Mostly paper records for maintenance and testing.

Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?

A *Locations already available through GIS.*

Q Are records kept on materials stored in these tanks? Is there compatibility information kept on materials vs. tank construction? Do any tanks have multiple purposes (store more than one type of liquid over a given period)?

A *Records are kept on materials in the tanks. No compatibility information kept directly - engineered into tank itself based on intended use. There are no multi-purpose tanks (no change of contents).*

Compliance

Q Is there a formal tank inspection schedule? What are the requirements (frequency, etc.)? Who conducts these?

A *Tanks require inspection by MDE. Supposed to be once per month, but actual frequency varies. Getting tank inspections on a more formal schedule is in the works. Inspections are conducted by the hazardous materials people.*

Q Is there a formal confined-space entry program applicable to these tanks? Are records kept on permits issued? By whom? What form?

A *There is a confined space entry program for Bulk Tanks. Referred to fuel farm for more information.*

Q Is there a specific SPCC Plan and/or other plans/Manuals (e.g., O&M) that pertain to above ground storage tanks? Would it be beneficial to access these via a GIS?

A *A SPCC plan does exist and applies generally to all of Pax River.*

Hazardous Materials Storage, Tracking and Disposal

Contact: Mr. Ritch Bullis
Pax River - Haz. Material Control and Mgmt. Program Office
Ph: 1-(301)-342-1817

Date of Interview: July 31, 1997

Hazardous Materials

Q Is this facility subject to SARA 312/313 reporting as required under OSHA 1910? Are past SARA reports kept and in what form(s)? Do you feel it would be beneficial to link SARA reporting through a GIS hazardous materials management system? If so, would SARA reporting be on a chemical or product basis?

A *Yes - primarily paper records are kept. SARA 312/313 supporting information (e.g., MSDSs) and data are kept in Hazardous Inventory Control System (HICS); reporting is now based in part on materials tracking through NAVICP material tracking program. HSMS is to replace HICS eventually. HICS is not connected to APMM and is not Oracle compliant. Reporting is done on a chemical specific basis rather than a product basis. SARA reports are generated by contractors who have their own programs for manipulating site-specific data and generating Form Rs (e.g., EPA's PIPES program for emissions). Only paper copies of the reports are available at the NAS. Generally, the SARA report requires a letter to state and community stating that thresholds have not been reached and/or chemical specific exemptions do not require disclosure of information.*

Q Is there an active inventory of hazardous materials stored on site? Is this an electronic or paper information source? Is it regularly updated? How and how often?

A *Two warehouses are used to manage incoming hazardous materials; a NAVICP chemical inventory management program is used to track hazardous materials quantities and distribution. Chemical containers are bar coded so they can be tracked and zeroed out. Warehouses submit monthly reports on number of containers outstanding and number that were returned empty. It is not directly linked to WASTE, a separate waste management program used at the NAS. Also, CHEMTREK is used to track authorized users of the various hazardous materials - CHEMTREK can tie into HICS for information.*

Q What types of hazardous materials are stored on site? What types of storage facilities are provided for these materials?

A *All kinds - too extensive to list. Large quantities of various aircraft fuels as well as other supporting chemicals. Primarily stored at HazMart Warehouses or at customer "satellite" storage areas until used.*

Q Are purchasing records maintained for chemicals brought to this facility by outside suppliers? How and where are these records kept? What information is provided (container size, content, hazard classifications, etc.) by the manufacturer(s)?

A *There is a supply computer that keeps purchasing records. HMP does not use this information because it does not provide them with a "real time" picture. The purchasing system is known to interface with EMIS. Information regarding volumes, content, hazard classifications are all kept by HMP on EMIS once material is brought on site. EMIS does let you make mistakes (not too many checks), so it is only as good as the person inputting the data.*

Q Are materials consumption records kept? How and where? Are they regularly updated and by whom?

A *Consumption records are the usage logs provided generated from zeroing out chemical containers at the warehouses. Not sure how fuel consumption records are kept. These are relatively current because HazMart will not issue "customers" more material without them documenting use of previously issued material. In some cases, there are restrictions on how much material a customer can be issued, so they cannot hold a large inventory themselves for long periods.*

Q Are MSDS records maintained for hazardous materials generated/stored on site? Is this an electronic or paper information source? Is this regularly updated? How and how often? Do these records pertain strictly to chemicals used presently or do they also encompass chemicals that may not be used currently?

A *MSDS information is available on CD ROM from HSMS and are also available on-line. Updated versions are issued quarterly. Using HICs MSDSs for SARA reporting still.*

Q Is there a specific SPCC Plan and/or other plans that pertain to the storage of hazardous materials? Would it be beneficial to access these via a GIS?

A *There is a base-wide SPCC plan that applies to the facility, but currently is just for jet fuels (fuels are within the domain of "Supply", not Hazardous Materials. No benefit at this location since it is not specific to Hazardous Materials.*

Hazardous Waste Storage, Tracking and Disposal

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Date of Interview: July 31, 1997

Hazardous Wastes

Q How are these hazardous wastes regulated (under what programs)?

A *RCRA regulated and non-regulated (off-spec fuels) wastes. These are regulated under Maryland RCRA requirements. Also, have to comply with POP standards for transportation of these wastes. Most hazardous wastes are disposed in South Carolina, which files documentation within 45 days - Maryland requires 30-day filing.*

Q How and where are hazardous wastes stored (satellite storage areas)? Are appropriate area warning placards placed near the storage areas? Are these locations monitored or secured by any means?

A *Local oversized flame resistant lockers for <15-day storage. Satellite storage areas for <90 day storage (not many). Daily waste pick-ups are available for high volume generation areas. Small generators have pick-up every 2 weeks or on request (<15-day areas). Each area is properly labeled and secured (locked, with single point-of-contact) based on the NAS Hazardous Waste Management Plan.*

Q Are appropriate hazard/content labels applied to hazardous waste containers?

A *Yes. A program is in place to label all hazardous waste containers appropriately.*

Q Are waste volumes and quantities tracked via paper trail or in database type system or both? What information is tracked?

A *A Hazardous Waste Manifest Program is used as a stand alone application to generate and maintain over-the-road transport records of hazardous wastes.*

Q Are these waste disposed on site or off site? Are manifest records kept for hazardous waste transport activities? What other DOT-type requirements must be complied with in shipping?

A *All hazardous wastes are disposed off-site. Dealing with former hazardous waste disposal location through IRP and trying to clean them up. Hard copies of manifests are considered official, since they cannot be manipulated.*

Q Are certificates of disposal issued by the receiving facility? What information is contained on these certificates?

A *Yes. Volumes, dates, signatures, etc.*

Q What kind of hazardous waste information should be managed through a GIS and what should not?

A *Information on accumulation areas should be in a GIS to provide a real time snap shot of the types and locations of various hazardous. In addition, it could be beneficial to be able to know who/where people may have been exposed to hazardous wastes from a hazard communications standpoint. Should manage hazardous waste training information better. Would like to have the whole manifest process automated - do not know if this is possible within a GIS.*